

What is claimed is:

1. A parts mounting apparatus comprising:
  - a parts feeder feeding parts;
  - 5 a board holding mechanism including a board holder which holds a board on which the parts are to be mounted at a parts mounting station, said board holder being designed to be moved vertically to hold the board at a given level;
  - a parts mounting mechanism including a mounting unit, the
  - 10 mounting unit working to pick up one of the parts supplied from said parts feeder and move vertically along a vertical constant stroke to mount the picked up part on the board held by the board holder of said board holding mechanism;
  - a storage storing therein parts data on height of each of the
  - 15 parts; and
  - a controller determining a target level at which the board is to be held by the board holder of said board holding mechanism at the parts mounting station based on the parts data on the height of the part held by the mounting unit of said parts mounting mechanism
  - 20 and controlling an operation of said board holding mechanism to move the board holder vertically so that the board holder holds the board at the target level for mounting the part on the board at the parts mounting station.
- 25 2. A parts mounting apparatus as set forth in claim 1, wherein said board holder is moved vertically by an electronic motor through

a mechanism linkage.

3. A parts mounting apparatus as set forth in claim 2, wherein the mechanical linkage is implemented by a lever linkage connecting  
5 at one end with an output shaft of the electronic motor and at the other end with said board holder.

4. A parts mounting apparatus as set forth in claim 1, wherein said board holder includes an upper and a lower rail and a first  
10 urging member, one of the upper and lower rails having a vertically elongated hole into which a pin is inserted through the other of the upper and lower rails, the first urging member being disposed between the upper and lower rails to urge the upper and lower rails vertically in opposite directions, wherein said board holding  
15 mechanism has a supporting member carried on a second urging member below the lower rail, and wherein said controller moves the upper rail downward along with the lower rail with aid of urging pressure of the first urging member until the lower rail hits on the supporting member, lowers the upper rail further relative to the  
20 lower rail to nip the board between the upper rail and the lower rail, and lowers the upper rail further along with the lower rail against urging pressure of the second urging member to bring the board to the target level.

25 5. A parts mounting apparatus as set forth in claim 1, wherein when it is required to mount parts of different height, the controller

controls said mounting unit so as to mount the parts in order of having shorter height.

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